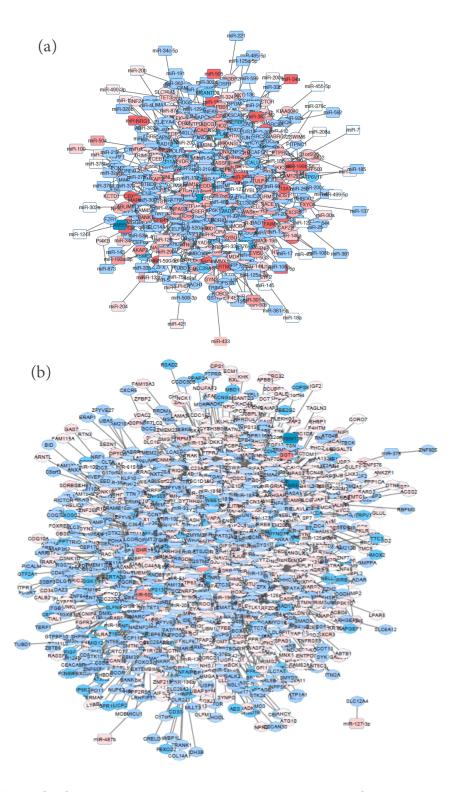


Manuscript number: SREP-15-19125 Title: Complexity and Specificity of the Neutrophil Transcriptomes in Juvenile Idiopathic Arthritis

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**Figure S1. Overall integrated miRNA-gene regulatory network**. Graphical representation of regulatory network for JIA (a) and CF (b). Rectangles: miRNAs. Circles: target genes. Red: up-regulated miRNAs and target genes when compared to HC. Blue: down-regulated miRNAs and target genes when compared to HC.

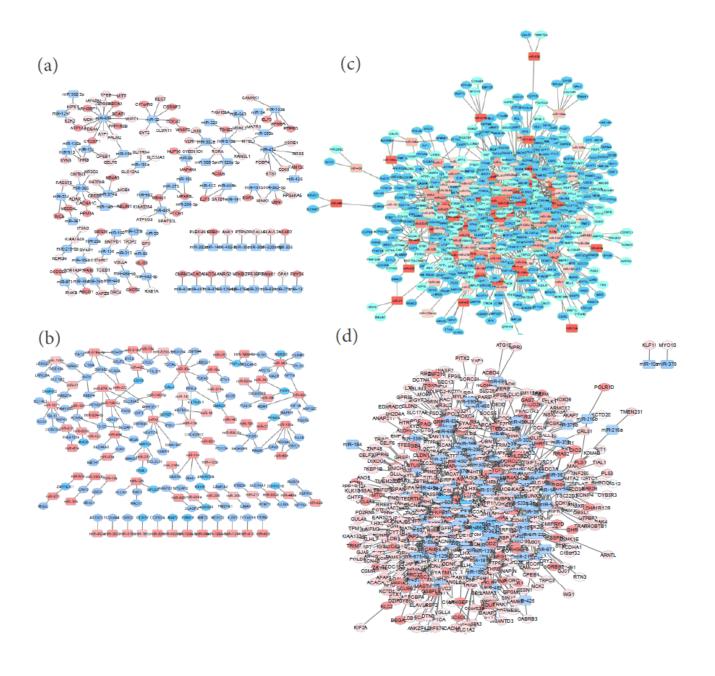
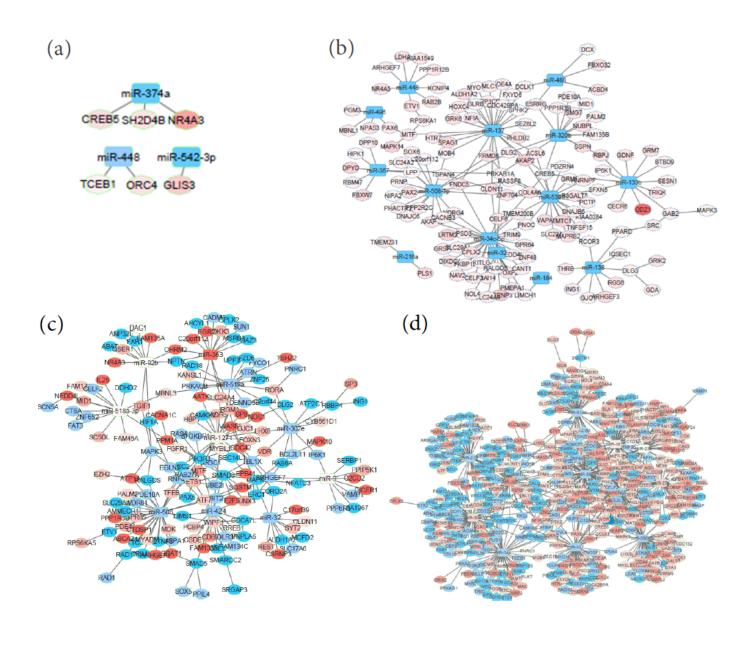


Figure S2. Integrated miRNA-gene regulatory network with the expression of miRNAs and their target genes in the opposite directions. Graphical representation of regulatory networks from up-regulated miRNAs and down-regulated target genes in JIA (a) and CF (c). Graphical representation of regulatory networks from down-regulated miRNAs and up-regulated target genes in JIA (b) and CF (d). Rectangles: miRNAs. Circles: target genes. Red: up-regulated miRNAs and target genes when compared to HC. Blue: down-regulated miRNAs and target genes when compared to HC.



**Figure S3. Integrated miRNA-gene regulatory networks from hub miRNAs.** Graphical representation of regulatory network in JIA (a) and CF (b). Rectangles: miRNAs. Circles: target genes. Red: up-regulated miRNAs and target genes when compared to HC. Blue: down-regulated miRNAs and target genes when compared to HC.

Table S1: 216 differentially expressed genes between JIA and HC

						stdev
Gene Symbol	Mean (JIA)	Median (JIA)	stdev (JIA)	Mean (HC)	Median (HC)	(HC)
ACER3	5.014	5.019	0.511	5.625	5.621	0.78
ACPL2	3.669	3.4	0.911	4.405	4.292	0.866
AP2M1	10.223	10.211	0.384	9.401	9.249	
APBB2	4.14	4.112	0.742	3.553	3.615	0.756
ASNSD1	7.003	7.038	0.477	6.369	6.606	1.026
BRWD3	7.903	7.817	0.62	7.22	7.175	0.613
C21orf33	5.55	5.607	0.509	4.877	4.81	0.611
CD22	5.116	5.167	0.702	4.452	4.675	0.833
CD9	8.267	8.243	0.643	8.982	8.885	0.967
CDK14	5.494	5.608	0.677	4.872	4.965	0.751
CHRFAM7A	7.304	7.339	0.529	7.913	7.909	0.825
CREB5	7.912	7.923	0.65	7.29	7.328	0.609
CYP26B1	5.581	5.461	0.72	4.902	4.851	0.653
DCUN1D1	8.672	8.845	0.742	7.544	7.772	
DERA	2.394	2.255	0.791	3.052	3.017	0.905
ELF5	7.249	7.333	1.268	8.164	8.018	1.008
ENTPD7	7.042	7.065	0.82	7.639	7.676	0.451
EPB41	4.678	4.689	0.788	3.945	4.043	
H2AFY	4.723	4.56	0.689	4.133	4.106	
HLA-DRB1	3.708	3.476	1.152	5.151	4.699	
HMGN3	6.827	6.808	0.969	5.651	5.728	
IDNK	4.997	5.073	0.871	5.712	5.768	
IL8	11.904	12	0.682	11.195	11.475	0.862
IQGAP2	7.454	7.405	0.643	6.817	6.696	0.835
ITGB1BP2	4.461	4.439	0.704	5.062	5.058	
KHDRBS2	4.854	4.639	0.98	4.075	3.933	1.003
KIAA0930	7.446	7.683	0.748	8.038	8.141	0.494
LHCGR	2.387	2.134	1	3.291	3.177	1.226
LRP1	7.206	7.222	0.7	6.585	6.697	0.715
LRRC29	3.251	3.237	0.72	3.868	3.822	0.632
MAN1A2	8.532	8.565	0.613	7.828	7.821	0.411
MAPKAPK2	5.905	5.843	0.478	5.283	5.35	0.583
MED27	6.379	6.513	0.784	6.966	6.982	0.469
MLL3	11.102	11.192	0.291	10.502	10.413	0.312
MLLT4	6.245	6.263	1.038	5.403	5.552	1.053
NFAT5	3.715	3.727	0.643	4.311	4.436	0.844
PCDH8	3.415	3.477	0.751	4.451	4.308	1.379
PCNA	2.619	2.477	0.764	3.214	3.203	0.726
PLXNA2	6.864	6.835	0.409	6.205	6.411	0.912
PLXNB2	5.612	5.72	0.867	4.689	4.935	1.244
PRKACA	8.336	8.186	0.706	9.165	9.418	
PRKAR2B	7.718	7.501	1.119	6.552	6.543	0.934
PSG4	3.499	3.491	0.972	4.381	4.594	
PSG8	4.62	4.763	0.748	5.214	5.318	0.737

RHOT2	4.615	4.609	0.64	5.235	5.383	0.709
ROMO1	8.515	8.615	0.466	7.721	7.731	0.723
RPL10	11.716	11.784	0.56	10.964	11.38	1.151
SLC25A19	3.712	3.939	0.9	2.941	2.785	0.855
SMARCAL1	4.202	4.271	0.846	4.836	4.9	0.698
SNX18	6.263	6.294	0.769	6.852	6.804	0.481
SSNA1	6.562	6.549	0.583	7.163	7.204	0.37
STIL	3.731	3.899	0.901	3.088	2.986	0.678
SUSD4	4.359	4.538	0.909	5.038	4.992	0.53
TBC1D15	3.857	3.977	1.224	2.767	2.399	1.457
TENC1	3.453	3.464	0.394	4.05	4.013	0.527
TGM3	7.042	7.088	0.711	6.393	6.413	0.821
THNSL2	2.874	2.877	0.519	3.673	3.494	0.902
TPGS2	2.257	1.925	1.125	3.292	3.36	1.382
TPM3	4.493	4.547	0.79	3.75	3.72	0.903
TRIM37	4.034	4.133	0.891	4.728	4.78	0.661
UBE2M	4.465	4.639	0.858	5.153	5.131	0.564
VCAN		6.413				
	6.507		0.851	5.651	5.804	1.08
VIP	2.525	2.56	0.618	3.11	3.092	0.743
WDR20	7.772	7.855	0.407	6.947	6.843	0.558
XRCC5	5.699	5.855	0.749	5.096	5.249	0.694
ZMAT2	7.792	7.827	0.294	7.194	7.143	0.42
ZNF107	9.499	9.439	0.888	8.739	8.593	0.813
ZNF180	4.573	4.656	0.753	5.317	5.239	0.55
AAMP	5.618	5.517	0.435	6.236	6.322	0.525
ABCA13	7.949	7.986	0.433	7.296	7.431	0.645
ABCB10	4.686	5.171	1.262	5.616	5.683	0.957
ACSF2	6.009	6.011	0.755	6.644	6.57	0.827
AFF1	5.658	5.682	0.765	4.745	5.101	1.31
AGGF1	3.671	3.507	0.909	4.403	4.538	0.761
ALDH6A1	2.765	2.713	0.835	3.62	3.59	1.23
ANAPC4	3.744	3.658	0.77	4.445	4.358	0.802
ANXA1	7.622	7.631	0.708	8.461	8.537	0.78
ANXA6	6.996	6.807	0.762	7.741	7.833	0.812
AP2A1	6.474	6.565	0.706	7.078	7.138	0.377
APOOL	6.331	6.419	0.681	6.93	6.93	0.434
ARMC10	6.649	6.737	0.621	7.241	7.222	0.636
AS3MT	4.496	4.557	0.786	5.207	5.292	0.719
ASRGL1	5.619	5.673	0.716	6.213	6.174	0.808
ASTE1	4.592	4.65	0.632	5.198	5.18	0.61
ATAD5	2.549	2.503	0.616	3.142	3.223	0.714
ATP6V0A2	4.33	4.42	0.773	4.939	4.989	0.753
ATXN2	5.108	5.347	0.93	5.733	5.751	0.564
BCAS3	8.981	9.059	0.548	9.647	9.519	0.585
BRD7	5.454	5.635	0.948	6.109	6.196	0.625
BTK	7.845	7.944	0.635	8.497	8.477	0.398
C10orf88	4.599	4.45	0.889	5.285	5.388	0.864
CAB39L	4.39	4.438	0.84	4.999	5.104	0.617
CADJE	4.39	4.436	0.64	4.333	5.104	0.017

CCDC53	5.653	5.715	0.778	6.239	6.265	0.466
CCDC7	4.796	4.767	0.93	5.438	5.418	0.611
CCDC83	5.556	5.583	0.645	4.917	4.979	0.687
CCR3	6.603	6.765	1.161	7.559	7.596	0.8
CCT5	5.711	5.618	0.651	6.298	6.344	0.488
CD164	8.64	8.805	0.797	9.232	9.232	0.496
CD300LB	5.868	5.874	0.771	6.532	6.527	0.664
CD300LF	8.819	8.905	0.614	9.417	9.344	0.54
CD55	7.892	7.723	0.631	7.288	7.455	0.64
CD84	3.751	3.764	0.967	4.548	4.593	0.757
CDC16	5.904	5.812	0.9	6.626	6.66	0.654
CDK5RAP2	5.951	6.043	0.619	6.566	6.445	0.592
CEP250	4.696	4.672	0.846	5.365	5.296	0.756
CLN5	5.544	5.635	0.686	6.149	6.098	0.545
CLTCL1	5.603	5.592	0.651	5.01	5.089	0.829
COG7	5.309	5.356	0.72	5.9	5.871	0.408
CRYZL1	5.21	5.069	0.826	5.937	5.747	0.549
CS	6.465	6.598	0.694	7.061	6.969	0.654
CTNS	4.68	4.769	0.458	5.278	5.224	0.71
CYB5B	4.994	5.058	0.716	5.714	5.764	0.651
DAAM1	4.2	4.203	0.974	4.988	5.092	0.838
DENND1B	7.073	7.045	0.685	7.668	7.831	0.635
DIP2A	6.229	6.298	0.818	6.869	6.889	0.515
DNAL1	1.88	1.7	0.804	2.61	2.505	1.019
DOK2	7.665	7.668	0.654	8.272	8.13	0.505
DRAP1	11.25	11.384	0.57	10.627	10.618	0.565
EBP	4.354	4.398	1.028	5.432	5.445	0.757
ECHDC3	6.35	6.238	0.58	5.752	5.78	0.691
EFTUD1	4.319	4.174	0.816	4.971	4.964	0.808
EMR1	10.249	10.394	0.841	11.208	11.278	0.824
ERP29	6.257	6.364	0.866	6.874	6.921	0.575
FAIM	5.82	5.763	0.531	5.191	5.292	0.776
FAM63B	7.381	7.41	0.515	7.979	8.006	0.41
FAM82B	6.268	6.36	0.759	6.881	6.973	0.519
FNBP4	7.706	7.58	0.596	8.304	8.329	0.418
FUCA1	7.049	6.941	0.647	7.685	7.708	0.507
G2E3	5.713	5.767	0.759	6.421	6.416	0.513
GART	5.559	5.715	0.59	6.204	6.225	0.466
GIN1	4.632	4.765	0.687	5.255	5.329	0.621
GPR19	4.339	4.28	0.723	4.964	5.027	0.861
HAX1	6.906	6.976	0.77	7.539	7.568	0.453
HCK	10.005	10.024	0.233	9.372	9.405	0.392
HMG20B	6.073	6.185	0.71	6.741	6.717	0.477
IFT80	3.832	3.846	0.915	4.684	4.815	0.954
IL3RA	5.623	5.628	0.729	6.318	6.218	1.024
IMPDH1	8.463	8.428	0.416	7.844	7.904	0.498
INO80C	6.377	6.501	0.645	7.017	7.126	0.497
INPP1	5.714	5.842	0.707	6.329	6.292	0.858

INPP5B	8.473	8.371	0.636	9.088	9.096	0.529	
INPP5F	2.713	2.645	1.094	3.859	4.073	1.18	
KANSL2	5.135	5.28	0.86	5.749	5.749	0.478	
KIF13B	5.788	5.815	0.699	6.69	6.804	0.907	
LILRA2	10.315	10.389	0.316	9.727	9.638	0.469	
LOC1005056	79 4.916	5.112	0.759	5.608	5.716	0.79	
LOC81691	3.576	3.429	0.844	4.292	4.326	0.917	
LRIG1	5.173	5.345	0.69	5.782	5.813	0.676	
LRRC6	10.496	10.614	0.509	9.859	10.036	0.917	
MCM3AP	6.942	7.188	0.825	7.558	7.585	0.412	
METTL10	5.158		1.036	5.908	5.927	0.645	
MRPL49	4.856	4.77	0.734	5.565	5.646	0.622	
MSANTD3	6.134	6.116	0.608	6.745	6.886	0.597	
NBEAL1	3.805	3.491	1.19	4.817	5.177	1.25	
NDUFAF1	5.135	5.267	0.876	5.81	5.854	0.53	
NTAN1	6.05	5.994	0.776	6.7	6.551	0.629	
NUP107	3.761	3.69	0.892	4.486	4.571	0.703	
NUP85	6.743	6.808	0.612	7.396	7.4	0.473	
ODZ1	6.286	6.517	1.011	5.09	5.197	1.421	
PARVB	5.422	5.308	0.693	4.835	4.793	0.685	
PCBD2	3.462	3.564	0.659	4.061	4.131	0.544	
PFKM	3.887	3.879	0.678	4.735	4.641	0.877	
PIBF1	3.71	3.772	0.743	4.31	4.327	0.704	
PLK1S1	7.822	7.108	1.464	9.054	9.344	1.107	
POMT1	5.077	5.311	1.045	5.873	5.871	0.537	
PPP2CB	3.921	3.784	0.955	4.627	4.616	0.721	
PPP2R4	5.46	5.514	0.53	6.088	6.2	0.43	
PRDM15	4.974	5.095	1.011	5.707	5.814	0.708	
PRR5L	6.474	6.487	0.904	7.182	7.312	0.768	
PSPH	5.162	5.182	1.16	6.197	6.657	1.209	
PTPN1	5.433	5.462	0.661	6.063	6.143	0.564	
RAD23B	7.35	7.465	0.424	6.504	6.47	0.865	
RBM14	8.57	8.541	0.443	9.198	9.312	0.382	
RECQL	5.371	5.64	0.895	6.009	5.956	0.559	
REEP4	4.828	5.067	0.79	5.447	5.525	0.704	
RNF5	8.315	8.396	0.532	9.014	8.927	0.383	
RSPH10B	2.711	2.522	0.593	3.325	3.463	0.527	
RYK	5.364					0.531	
S100PBP	5.572	5.648	0.768	6.169	6.298	0.53	
S100Z	7.431	7.539	0.53	8.021	7.968	0.525	
SCP2	5.641	5.858	0.997	6.454	6.396	0.86	
SETDB2	5.836	5.917	0.875	6.426	6.511	0.526	
SFI1	6.229	6.206	0.832	6.82	6.876	0.543	
SKA2	5.149	5.187	0.71	5.736	5.855	0.582	
SLC16A3	10.116	10.054	0.622	9.277	9.307	0.346	
SLC19A1	8.361	8.5	0.508	7.687	7.727	0.331	
SLC25A25	5.114	5.077	0.562	5.709	5.764	0.675	
SLC25A30	4.814	4.802	1.019	5.698	5.766	0.624	

SLFN12	6.344	6.1	0.809	7.022	7.127	0.919
SMN1	5.259	5.165	0.577	5.878	5.897	0.872
SMPDL3A	4.131	4.159	0.865	3.45	3.42	0.756
SNRNP25	6.119	6.146	0.8	6.818	6.893	0.925
SPPL2A	7.653	7.869	0.785	8.242	8.244	0.444
STXBP5	7.819	7.807	0.444	8.606	8.682	0.655
SUGP2	4.847	4.961	0.816	5.442	5.481	0.538
TAS2R31	2.539	2.489	0.605	3.145	3.027	0.849
TAX1BP3	7.709	7.618	0.557	8.336	8.419	0.503
TCEB3C	4.014	4.028	0.502	3.403	3.456	0.663
TEC	5.56	5.427	0.845	6.292	6.181	0.983
TMEM216	6.153	6.16	0.591	6.753	6.791	0.474
TMEM50B	7.396	7.423	0.686	7.981	7.914	0.67
TMEM68	5.6	5.71	0.785	6.205	6.169	0.545
TMX1	4.554	4.671	0.946	5.36	5.473	0.6
TRAPPC4	5.397	5.517	0.764	6.07	6	0.444
UCK1	8.19	8.19	0.36	8.87	8.996	0.46
ULK4	4.493	4.58	1.106	5.336	5.393	1.015
UPRT	5.295	5.108	0.713	5.973	6.128	0.631
VPS33A	4.501	4.519	0.781	5.24	5.36	0.63
WDTC1	9.434	9.546	0.312	8.689	8.651	0.351
YTHDC1	9.62	9.614	0.306	8.994	8.847	0.494
ZDHHC13	5.919	5.935	0.648	6.528	6.532	0.427
ZMYND8	6.912	7.059	0.566	7.532	7.595	0.409
ZNF28	3.147	3.085	0.795	3.825	3.796	0.862
ZNF395	6.655	6.709	0.666	7.253	7.187	0.665
ZNF750	4.008	4.166	0.784	3.335	3.411	0.862
ZSCAN29	5.148	5.07	0.944	6.033	6.04	0.799

<i>p</i> -value	Fold Change (JIA vs HC)	FDR	Unique to JIA or common between JIA and CF
8.61E-05	-1.528	0.0133	unique
5.39E-04	-1.665		unique
3.79E-08	1.768		unique
9.47E-04	1.502		unique
6.26E-04	1.552		unique
6.51E-06	1.605		unique
1.05E-06	1.595		unique
2.74E-04	1.584		unique
2.11E-04	-1.641		unique
2.54E-04	1.539		unique
1.84E-04	-1.525		unique
4.87E-05	1.54		unique
5.11E-05	1.601		unique
1.97E-07	2.184		unique
9.87E-04	-1.579	0.0512	unique
9.45E-04	-1.885		unique
3.29E-04	-1.512	0.0281	unique
2.55E-04	1.663	0.0245	unique
3.11E-04	1.505	0.0273	unique
2.93E-05	-2.719	0.0072	unique
2.28E-06	2.259	0.0016	unique
1.88E-04	-1.642	0.0208	unique
1.18E-04	1.635	0.0159	unique
2.91E-04	1.554	0.0263	unique
6.91E-05	-1.517	0.0118	unique
9.18E-04	1.716		unique
1.72E-04	-1.507		unique
5.89E-04	-1.871		unique
2.42E-04	1.538		unique
1.71E-04	-1.534		unique
2.89E-07	1.629		unique
1.82E-06	1.538		unique
2.76E-04	-1.502		unique
4.08E-13	1.516		unique
7.00E-04	1.793		unique
6.95E-04	-1.511		unique
7.56E-05	-2.05		unique
8.13E-04	-1.511		unique
7.60E-05	1.579		unique
2.47E-04	1.897		unique
4.11E-06	-1.776		unique
5.89E-06 2.83E-04	2.245		unique
	-1.844		unique unique
7.73E-04	-1.51	0.0453	unique

1.23E-04	-1.537	0.0162 unique
1.25E-07	1.735	0.0003 unique
3.60E-04	1.684	0.0295 unique
2.57E-04	1.706	0.0246 unique
6.90E-04	-1.553	0.0424 unique
2.28E-04	-1.505	0.0231 unique
2.16E-06	-1.517	0.0015 unique
8.86E-04	1.562	0.0485 unique
2.71E-04	-1.6	0.0253 unique
5.84E-04	2.128	0.0387 unique
2.05E-07	-1.512	0.0003 unique
3.55E-04	1.568	0.0293 unique
6.14E-06	-1.74	0.0028 unique
4.83E-04	-2.05	0.0348 unique
2.27E-04	1.674	0.0231 unique
3.02E-04	-1.618	0.0269 unique
1.45E-04	-1.61	0.0178 unique
1.96E-04	1.81	0.0212 unique
2.92E-04	-1.5	0.0263 unique
8.89E-11	1.772	0 unique
4.95E-04	1.519	0.0354 unique
1.79E-10	1.514	0 unique
2.15E-04	1.694	0.0224 unique
7.95E-06	-1.676	0.0033 unique
2.38E-07	-1.534	0.0004 common
1.03E-06	1.573	0.001 common
6.30E-04	-1.906	0.0404 common
6.98E-04	-1.552	0.0404 common
2.70E-04	1.883	0.0427 common
3.15E-04	-1.661	0.0232 common
5.00E-04	-1.809	0.0276 common
1.91E-04	-1.626	0.0336 common
4.11E-06	-1.788	0.0023 common
8.08E-05	-1.677	0.0128 common
3.40E-05	-1.52	0.0078 common
3.36E-05	-1.515	0.0078 common
9.00E-05	-1.507	0.0137 common
9.98E-05	-1.637	0.0146 common
9.47E-04	-1.51	0.0502 common
5.77E-05	-1.522	0.0106 common
1.81E-04	-1.509	0.0203 common
8.06E-04	-1.525	0.0462 common
9.86E-04	-1.542	0.0512 common
1.85E-06	-1.586	0.0014 common
8.75E-04	-1.575	0.0481 common
2.24E-06	-1.571	0.0015 common
9.82E-04	-1.61	0.0512 common
6.99E-04	-1.525	0.0428 common

2.52E-04	-1.502	0.0244 common
8.83E-04	-1.56	0.0484 common
6.67E-05	1.557	0.0115 common
1.15E-04	-1.939	0.0157 common
4.06E-05	-1.503	0.0085 common
3.27E-04	-1.508	0.028 common
1.49E-04	-1.584	0.0182 common
2.59E-05	-1.513	0.0067 common
8.15E-05	1.519	0.0128 common
1.77E-04	-1.738	0.0201 common
1.92E-04	-1.65	0.021 common
3.14E-05	-1.531	0.0075 common
5.17E-04	-1.59	0.0362 common
7.40E-05	-1.52	0.0122 common
6.82E-04	1.509	0.042 common
7.06E-05	-1.506	0.0119 common
3.87E-05	-1.655	0.0083 common
2.44E-04	-1.511	0.0239 common
2.55E-05	-1.514	0.0066 common
1.83E-05	-1.647	0.0055 common
3.30E-04	-1.727	0.0282 common
1.91E-04	-1.51	0.021 common
1.78E-04	-1.558	0.0201 common
6.99E-04	-1.659	0.0428 common
2.92E-05	-1.523	0.0072 common
7.77E-06	1.54	0.0033 common
2.77E-06	-2.111	0.0017 common
8.50E-05	1.513	0.0132 common
7.42E-04	-1.571	0.0442 common
3.11E-06	-1.945	0.0019 common
6.26E-04	-1.535	0.0402 common
6.55E-05	1.546	0.0114 common
5.36E-07	-1.513	0.0006 common
1.46E-04	-1.529	0.0179 common
5.11E-06	-1.514	0.0026 common
1.19E-05	-1.555	0.0042 common
1.60F-05	-1.634	0.0051 common
1.72E-06	-1.564	0.0013 common
9.07E-05	-1.54	0.0137 common
8.24E-04	-1.542	0.0467 common
7.71E-05	-1.55	0.0125 common
5.03E-13	1.55	0 common
1.35E-05	-1.589	0.0046 common
1.43E-04	-1.804	0.0178 common
8.02E-04	-1.619	0.0461 common
6.86E-08	1.535	0.0002 common
9.45E-06	-1.558	0.0002 common
8.64E-04	-1.531	0.0479 common
0.04L-04	-1.551	0.0475 COMMON

2.14E-05	-1.532	0.006 common
3.06E-05	-2.212	0.0074 common
4.20E-04	-1.53	0.0322 common
4.20E-06	-1.869	0.0023 common
5.72E-09	1.503	0 common
1.88E-04	-1.616	0.0208 common
6.07E-04	-1.642	0.0397 common
2.03E-04	-1.526	0.0217 common
2.41E-04	1.555	0.0238 common
2.00E-04	-1.533	0.0215 common
4.46E-04	-1.683	0.0333 common
2.35E-05	-1.636	0.0063 common
3.12E-05	-1.527	0.0075 common
4.84E-04	-2.016	0.0349 common
1.93E-04	-1.597	0.0211 common
1.66E-04	-1.569	0.0193 common
2.18F-04	-1.653	0.0226 common
2.46E-06	-1.573	0.0016 common
4.50E-05	2.291	0.0091 common
3.65E-04	1.502	0.0297 common
5.63E-05	-1.514	0.0104 common
7.43F-06	-1.799	0.0032 common
5.34E-04	-1.755	0.0369 common
1.17E-04	-2.35	0.0158 common
1.64E-04	-1.736	0.0192 common
5.99E-04	-1.632	0.0393 common
3.60E-07	-1.546	0.0005 common
6.01E-04	-1.662	0.0394 common
4.68E-04	-1.634	0.0342 common
2.54E-04	-2.049	0.0244 common
3.11E-05	-1.548	0.0075 common
4.28E-07	1.797	0.0006 common
7.04E-09	-1.545	0 common
5.48E-04	-1.556	0.0373 common
5.74E-04	-1.535	0.0383 common
1.58E-08	-1.624	0.0001 common
9.67E-06	-1.53	0.0038 common
3.65E-04	-1.501	0.0297 common
2.48E-04	-1.512	0.0242 common
5.46E-06	-1.505	0.0027 common
3.03E-04	-1.758	0.0269 common
9.27E-04	-1.505	0.0495 common
6.30E-04	-1.506	0.0404 common
2.03E-04	-1.502	0.0217 common
3.46E-09	1.789	0 common
8.24E-09	1.596	0 common
6.07E-05	-1.511	0.0109 common
3.80E-05	-1.845	0.0083 common

8.96E-04	-1.599	0.0487 common
3.46E-04	-1.536	0.0289 common
4.95E-04	1.604	0.0354 common
6.06E-04	-1.623	0.0396 common
2.37E-04	-1.504	0.0235 common
1.94E-08	-1.726	0.0001 common
4.80E-04	-1.51	0.0347 common
4.46E-04	-1.522	0.0333 common
2.17E-06	-1.545	0.0015 common
1.52E-05	1.527	0.0049 common
7.01E-04	-1.661	0.0428 common
7.77E-06	-1.515	0.0033 common
3.18E-04	-1.5	0.0277 common
2.79E-04	-1.521	0.0256 common
5.45E-05	-1.748	0.0102 common
2.62E-05	-1.594	0.0067 common
2.17E-10	-1.602	0 common
8.81E-04	-1.794	0.0483 common
3.97E-05	-1.6	0.0085 common
2.61E-05	-1.669	0.0067 common
2.64E-15	1.676	0 common
2.05E-09	1.544	0 common
1.31E-05	-1.525	0.0045 common
1.09E-06	-1.537	0.001 common
5.59E-04	-1.6	0.0377 common
1.78E-04	-1.514	0.0201 common
5.56E-04	1.595	0.0376 common
3.89E-05	-1.847	0.0083 common

Table S2: 70 Differentially expressed miRNAs between CF and HC

miRNA	Mean CF (log2)	Median CF (log2) stdev CF	1	Mean HC (log2)	Median HC (log2)
let-7i-star	3.813	3.956	0.663	2.963	2.885
miR-1201	1.475	1.505	0.154	1.263	1.255
miR-1247	1.641	1.655	0.19	1.945	2.044
miR-1250	3.328	3.37	0.593	2.48	2.338
miR-1263	2.27	2.311	0.275	2.712	2.719
miR-1267	2.049	2.009	0.118	2.301	2.354
miR-1272	2.666	2.662	0.132	3.002	2.942
miR-1273	1.297	1.327	0.145	1.517	1.482
miR-1278	1.05	1.081	0.112	1.481	1.357
miR-128	6.577	6.619	0.314	5.843	5.884
miR-1323	2.117	2.048	0.297	2.659	2.544
miR-137	1.029	1	0.16	1.288	1.289
miR-140-5p	7.328	7.388	0.357	6.687	6.814
miR-141	1.832	1.741	0.228	1.516	1.425
miR-141-star	1.048	1.05	0.051	1.162	1.14
miR-155-star	1.207	1.264	0.202	1.494	1.477
miR-16-2-star	1.382	1.377	0.254	1.873	1.754
miR-1827	1.145	1.197	0.187	1.469	1.29
miR-184	1.157	1.21	0.177	1.475	1.451
miR-196b	2.574	2.396	0.417	1.944	1.932
miR-198	1.642	1.726	0.378	3.016	2.874
miR-19a	5.233	5.222	0.289	4.453	4.57
miR-21	6.243	6.268	0.286	5.066	5.139
miR-223-star	2.691	2.597	0.575	1.936	1.745
miR-29b-1-star	5.832	5.976	0.469	4.891	5.077
miR-29c	5.059	5.111	0.561	4.125	4.239
miR-29c-star	2.974	2.931	0.365	2.332	2.169
miR-30c-2-star	1.045	1.068	0.194	1.389	1.385
miR-30e-star	6.26	6.334	0.558	5.148	5.283
miR-320b	11.112	11.089	0.396	11.663	11.746
miR-331-3p	5.604	5.557	0.149	5.089	5.265
miR-337-3p	2.812	2.791	0.169	3.375	3.246
miR-338-5p	6.4	6.47	0.411	5.791	5.935
miR-346	3.238	3.254	0.251	2.601	2.575
miR-34a-star	1.429	1.407	0.154	1.208	1.216
miR-34c-5p	1.479	1.517	0.187	1.801	1.714
miR-367-star	1.3	1.346	0.115	1.476	1.471
miR-369-3p	1.029	1.02	0.163	1.314	1.259
miR-374a-star	2.253	2.28	0.293	2.709	2.715
miR-421	7.282	7.393	0.439	6.586	6.734
miR-450b-5p	1.119	1.092	0.146	1.594	1.556
miR-455-3p	1.723	1.721	0.397	2.565	2.431
miR-484	6.452	6.433	0.511	5.693	5.815
miR-488	1.274	1.205	0.175	1.571	1.541
miR-494	4.747	4.574	0.445	3.396	3.573

miR-503	6.329	6.313	0.344	5.603	5.797
miR-505	4.74	4.692	0.51	3.562	3.672
miR-509-3p	1.131	1.101	0.176	1.463	1.282
miR-509-5p	1.295	1.264	0.226	1.745	1.647
miR-512-5p	1.199	1.215	0.156	1.482	1.389
miR-515-5p	1.053	1.08	0.098	1.317	1.273
miR-518f-star	1.035	1.071	0.157	1.271	1.249
miR-523	2.251	2.251	0.188	1.847	1.801
miR-539	1.723	1.71	0.237	2.074	2.207
miR-548a-3p	1.264	1.241	0.216	2.53	2.402
miR-548c-3p	1.484	1.507	0.158	1.728	1.688
miR-548j	1.095	1.085	0.097	1.312	1.257
miR-548p	1.084	1.125	0.167	1.345	1.309
miR-551a	3.97	4.171	0.628	2.713	2.526
miR-551b-star	4.782	4.82	0.526	5.704	5.615
miR-570	1.167	1.192	0.124	1.697	1.635
miR-583	1.147	1.163	0.166	1.391	1.413
miR-603	1.319	1.281	0.19	1.846	1.701
miR-629	7.986	8.011	0.303	7.555	7.634
miR-630	1.13	1.159	0.066	1.356	1.351
miR-7-1-star	3.243	3.063	0.662	2.274	2.23
miR-767-5p	1.228	1.231	0.098	1.475	1.449
miR-877	4.183	4.138	0.309	4.679	4.596
miR-886-3p	1.588	1.572	0.185	2.097	2.082
miR-92b-star	4.475	4.173	0.523	3.308	3.223

Table S3: 257 unique genes showing differentially expressed isoforms between JIA and HC

G	ene	MIDAS p-		Median_e	stdev_exo	Mean_gen
Entrez ID Sy	ymbol Isoform	value	Mean_exon (JIA)	xon (JIA)	n (JIA)	e (JIA)
14 A	AMP 259935	1 0.040911	5.616	5.495	0.428	6.214
20 AI	BCA2 323066	1 0.035206	6.917	6.965	0.349	7.415
160 AI	P2A1 383888	8 0.033791	9.757	9.808	0.322	8.553
160 Al	P2A1 383889	1 0.017649	10.118	10.122	0.249	8.553
221 AI	LDH3B1 333735	9 0.048334	6.806	6.791	0.393	7.901
301 AI	NXA1 317483	1 0.031332	9.117	9.046	0.615	10.797
308 AI	NXA5 278403	7 0.048343	6.839	6.848	0.859	8.687
309 AI		4 0.032862	7.68	7.648		8.296
309 AI				6.866	0.757	
327 AI				6.857	0.442	6.717
405 AI		6 0.037456		7.68		8.566
409 AI						
472 A	TM 334768	4 0.049988		7.669		8.108
	TP6V0B 233367			8.925	0.331	
582 BI				6.057		6.291
632 BG				8.45		7.475
752 FN				9.702		
836 CA						
841 CA					0.48	9.521
967 CI				8.533		9.088
972 CI				9.557		
987 LF				7.628	0.842	6.119
988 CI				5.146	0.476	8.09
1021 CI				7.011		6.239
1107 CF				8.741	0.342	7.71
1107 CF				7.895	0.371	7.71
1107 CF				8.951		7.71
1107 CF				8.166	0.457	7.71
1107 CF				9.022		7.71
1120 CF				9.176	0.316	7.968
1173 AI						
1173 AI						8.982
1173 AI				10.941		8.982
1173 AI				7.406	0.351	8.982
1173 AI				7.237		8.982
1232 CC				6.874	1.055	7.404
1441 CS				9.915	0.433	12.426
1488 C				7.011	0.396	6.565
1509 C				9.676	0.334	10.617
1611 D				7.694	0.306	8.56
1612 D				6.998	0.502	8.029
1622 DI				7.343		
1643 D				6.357		6.589
1890 TY	YMP 396600	5 0.020135	9.897	9.994	0.562	9.158

2015 EMR1	3818617	0.036101	11.491	11.623	0.714	9.077
2034 EPAS1	2480455	0.034242	6.268	6.193	0.568	6.445
2035 EPB41	2327738	0.043028	8.366	8.429	0.403	9.641
2113 ETS1	3397597	0.037588	7.947	7.875	0.754	8.22
2131 EXT1	3150161	0.030789	7.358	7.371	0.546	6.965
2149 F2R	2816469	0.046877	4.753	4.69	0.505	5.264
2153 F5	2443383	0.039779	8.45	8.561	0.703	8.744
2733 GLE1	3190549	0.044376	8.204	8.282	0.469	7.269
2874 GPS2	3743627	0.034053	8.333	8.369	0.294	6.313
2889 RAPGEF1	3227780	0.036484	8.62	8.666	0.585	8.804
2889 RAPGEF1	3227772	0.042022	9.089	9.233	0.572	8.804
2975 GTF3C1	3686228	0.048459	7.798	7.848	0.462	7.017
3065 HDAC1	2328900	0.043795	7.582	7.582	0.35	8.721
3096 HIVEP1	2895206	0.034946	8.544	8.536	0.38	8.983
3190 HNRNPK	3212342	0.049592	7.342	7.376	0.289	10.122
3557 IL1RN	2501235	0.049068	8.621	8.598	0.642	8.864
3682 ITGAE	3741593	0.047144	7.705	7.702	0.343	5.324
3682 ITGAE	3741604	0.047478	7.94	8.038	0.572	5.324
3682 ITGAE	3741594	0.028723	7.406	7.373	0.44	5.324
3692 EIF6	3903869	0.04592	7.615	7.561	0.284	7.563
3784 KCNQ1	3317411	0.045679	8.561	8.59	0.345	7.752
3837 KPNB1	3724797	0.041966	9.969	10.079	0.437	9.574
4034 LRCH4	3064123	0.02916	8.194	8.184	0.384	9.291
4034 LRCH4	3064119	0.028326	8.87	8.855	0.367	9.291
4035 LRP1	3417911	0.048391	6.65	6.77	0.599	6.785
4297 MLL	3351435	0.024492	7.893	7.911	0.539	7.368
4297 MLL	3351436	0.030134	7.998	7.943	0.61	7.368
4318 MMP9	3887227	0.035609	10.149	10.12	0.709	10.67
4627 MYH9	3959464	0.026419	10.063	10.087	0.38	10.981
4627 MYH9	3959466	0.03442	11.044	11.109	0.33	10.981
4627 MYH9	3959463	0.020278	12.145	12.144	0.264	10.981
4627 MYH9	3959461	0.025295	12.402	12.386	0.264	10.981
4627 MYH9	3959524	0.020807	11.549	11.536	0.259	10.981
4627 MYH9	3959526	0.048271	7.743	7.732	0.452	10.981
4650 MYO9B	3824072	0.042101	9.364	9.449	0.366	9.799
4763 NF1	3717065	0.033334	7.972	7.959	0.338	7.769
4763 NF1	3717061	0.038089	7.487	7.554	0.391	7.769
4791 NFKB2	3261657	0.031954	9.629	9.637	0.387	8.746
4818 NKG7	3868999	0.049357	8.414	8.157	0.823	8.352
4851 NOTCH1	3230183	0.038594	10.213	10.165	0.312	10.167
5045 FURIN	3608423	0.021704	8.857	8.872	0.32	8.783
5311 PKD2	2735249	0.03702	6.717	6.718	0.581	5.903
5335 PLCG1	3885574	0.047059	6.869	6.72	0.627	6.906
5430 POLR2A	3708747	0.024022	8.22	8.235	0.316	9.239
5430 POLR2A	3708749	0.042134	8.325	8.331	0.413	9.239
5430 POLR2A	3708746	0.017299	9.935	9.955	0.272	9.239
5479 PPIB	3629010	0.043905	8.767	8.717	0.258	9.537
5496 PPM1G	2545813	0.046653	9.233	9.31	0.484	7.512

5496 PPM1G	2545828	0.049763	6.727	6.722	0.472	7.512
5524 PPP2R4	3190946	0.044379	5.428	5.523	0.534	5.818
5532 PPP3CB	3294531	0.018874	9.119	9.085	0.327	6.655
5566 PRKACA	3852537	0.025583	7.878	7.806	0.389	9.253
5573 PRKAR1A	3732920	0.015868	10.795	10.779	0.258	11.025
5573 PRKAR1A	3732919	0.012101	10.456	10.487	0.296	11.025
5577 PRKAR2B	3018403	0.032367	7.812	7.674	1.135	6.271
5869 RAB5B	3417179	0.030887	7.302	7.349	0.471	8.768
5887 RAD23B	3183801	0.031117	7.391	7.493	0.43	8.437
6018 RLF	2331812	0.044809	6.754	6.809	0.276	8.674
6305 SBF1	3965898	0.025448	8.536	8.54	0.342	7.243
6305 SBF1	3965896	0.025698	8.295	8.306	0.279	7.243
6389 SDHA	2798575	0.035383	6.032	6.04	0.564	8.132
6502 SKP2	2806534	0.039415	6.525	6.461	0.391	6.843
6560 SLC12A4	3696096	0.028706	8.34	8.368	0.26	7.267
6573 SLC19A1	3935023	0.01566	8.461	8.621	0.498	8.965
6602 SMARCD1	3414411	0.032476	7.049	7.045	0.436	7.76
6722 SRF	2907750	0.043881	8.275	8.219	0.319	8.957
6829 SUPT5H	3833092	0.047262	7.294	7.273	0.401	7.608
6840 SVIL	3283123	0.039744	7.476	7.576	0.324	9.374
6901 TAZ	3996373	0.033744	6.988	6.995	0.324	7.293
6901 TAZ	3996376	0.049449	8.004	8.093	0.472	7.293
6944 VPS72	2434906	0.044097	10.622	10.634	0.162	7.833
6945 MLX	3721889	0.044691	7.268	7.28	0.246	8.439
7009 TMBIM6	3414219	0.04885	9.773	9.764	0.458	11.835
7037 TFRC	2712639	0.035174	8.776	8.512	0.814	6.479
7094 TLN1	3204808	0.040014	11.328	11.354	0.21	10.417
7287 TULP1	2951565	0.03139	7.382	7.39	0.256	5.515
7391 USF1	2440524	0.046527	6.656	6.628	0.307	9.263
7391 USF1	2440535	0.044924	8.23	8.479	0.565	9.263
7462 LAT2	3008196	0.023957	8.471	8.482	0.351	8.712
7520 XRCC5	2527006	0.039496	9.973	10.026	0.394	9.643
7551 ZNF3	3063669	0.043168	6.683	6.728	0.573	6.549
7586 ZKSCAN1	3015159	0.02657	7.295	7.279	0.44	6.996
7586 ZKSCAN1	3015158	0.024653	7.442	7.476	0.411	6.996
7733 ZNF180	3864931	0.04915	4.77	4.928	0.761	4.517
7799 PRDM2	2321279	0.043973	7.451	7.488	0.39	7.335
7917 BAG6	2949167	0.03266	7.62	7.642	0.304	8.033
7917 BAG6	2949166	0.034598	8.081	8.06	0.233	8.033
7917 BAG6	2949172	0.033035	8.094	8.144	0.258	8.033
7994 KAT6A	3133173	0.040092	9.631	9.649	0.444	10.158
8209 C21orf33	3923568	0.028778	5.556	5.593	0.496	6.156
8291 DYSF	2488370	0.025067	8.555	8.628	0.398	10.555
8291 DYSF	2488368	0.024452	10.514	10.566	0.372	10.555
8291 DYSF	2488270	0.02928	8.9	8.952	0.364	10.555
8291 DYSF	2488255	0.020747	10.728	10.718	0.217	10.555
8449 DHX16	2948491	0.031263	8.485	8.476	0.322	7.311
8522 GAS7	3744977	0.030902	8.454	8.427	0.461	7.922
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8556 CDC14A	2348944	0.046434	6.909	6.877	0.383	7.961
8604 SLC25A12	2586901	0.049997	5.794	5.862	0.787	5.203
8661 EIF3A	3309269	0.038842	8.02	7.947	0.4	8.325
8742 TNFSF12	3708776	0.043419	7.188	7.147	0.557	7.52
8925 HERC1	3628708	0.046025	7.953	7.909	0.476	8.518
8925 HERC1	3628658	0.041181	7.729	7.735	0.383	8.518
9057 SLC7A6	3666157	0.044889	7.621	7.558	0.62	7.554
9129 PRPF3	2358216	0.048381	6.54	6.585	0.371	9.377
9209 LRRFIP2	2669257	0.044042	7.388	7.344	0.506	7.307
9219 MTA2	3375878	0.040715	7.12	7.123	0.505	7.287
9221 NOLC1	3261510	0.037076	6.397	6.218	0.754	5.38
9296 ATP6V1F	3023220	0.042839	7.924	7.956	0.26	8.637
9632 SEC24C	3251881	0.016766	8.895	8.859	0.282	7.304
9632 SEC24C	3251879	0.011381	8.897	8.857	0.259	7.304
9632 SEC24C	3251883	0.034339	7.996	8.062	0.275	7.304
9632 SEC24C	3251856	0.035746	7.366	7.394	0.246	7.304
9632 SEC24C	3251858	0.025001	8.925	8.915	0.309	7.304
9640 ZNF592	3605858	0.022388	7.807	7.79	0.374	9.77
9663 LPIN2	3796341	0.034222	8.115	8.165	0.451	9.193
9704 DHX34	3837287	0.029101	8.341	8.343	0.282	8.324
9704 DHX34	3837290	0.023598	8.643	8.698	0.275	8.324
9748 SLK	3262437	0.048725	9.493	9.559	0.467	9.032
9772 KIAA0195	3734847	0.028831	8.568	8.548	0.326	7.307
9772 KIAA0195	3734845	0.038545	7.04	7.096	0.447	7.307
9818 NUPL1	3482261	0.040544	7.952	8.022	0.524	8.23
9826 ARHGEF11	2438677	0.047018	7.244	7.192	0.452	7.875
9826 ARHGEF11	2438672	0.042416	7.265	7.309	0.392	7.875
9826 ARHGEF11	2438664	0.034661	8.379	8.416	0.352	7.875
9855 FARP2	2536544	0.045697	5.006	5.032	0.734	5.523
9871 SEC24D	2783352	0.035487	8.341	8.33	0.35	8.481
9879 DDX46	2829522	0.043758	6.586	6.456	0.495	6.946
9879 DDX46	2829527	0.037215	8.059	8.053	0.261	6.946
9905 SGSM2	3706297	0.047511	7.34	7.322	0.415	6.918
9905 SGSM2	3706287	0.047993	6.189	6.179	0.454	6.918
9922 IQSEC1	2663436	0.039083	10.019	10.001	0.295	10.312
9922 IQSEC1	2663435	0.035752	8.865	8.879	0.34	10.312
9968 MED12	3980763	0.04907	8.286	8.36	0.396	9.358
10014 HDAC5	3758854	0.033581	7.24	7.233	0.343	8.375
10036 CHAF1A	3817530	0.046422	6.154	6.144	0.376	5.591
10075 HUWE1	4009343	0.046905	7.868	7.862	0.378	7.958
10106 CTDSP2	3458922	0.041447	10.025	9.988	0.356	10.889
10159 ATP6AP2	3974574	0.042885	6.54	6.639	0.448	9.629
10178 ODZ1	4020726	0.036286	6.379	6.541	0.966	5.673
10197 PSME3	3722181	0.030143	9.752	9.743	0.335	9.899
10211 FLOT1	2948620	0.044021	9.291	9.313	0.43	9.398
10238 DCAF7	3730755	0.019063	9.626	9.599	0.27	8.356
10295 BCKDK	3656850	0.04987	8.094	8.109	0.289	8.165
10295 BCKDK	3656849	0.0427	8.483	8.55	0.28	8.165

10299 MARCH6	2801682	0.023147	7.726	7.74	0.325	9.89
10362 HMG20B	3817057	0.046585	6.199	6.241	0.559	7.325
10444 ZER1	3226682	0.027862	7.249	7.278	0.35	8.062
10472 ZNF238	2388812	0.04452	8.34	8.333	0.298	9.297
10526 IPO8	3449350	0.048159	6.795	6.85	0.415	6.666
10540 DCTN2	3458633	0.045785	7.084	7.215	0.568	7.55
10641 NPRL2	2675275	0.037864	7.126	7.084	0.329	6.928
10765 KDM5B	2451364	0.039398	8.654	8.682	0.394	8.097
10788 IQGAP2	2816405	0.027781	8.754	8.916	0.548	9.206
10788 IQGAP2	2816301	0.039339	9.988	10.046	0.378	9.206
10788 IQGAP2	2816347	0.046469	10.766	10.753	0.401	9.206
10788 IQGAP2	2816299	0.030965	10.864	10.977	0.426	9.206
10847 SRCAP	3656496	0.037084	9.055	9.002	0.352	8.55
10847 SRCAP	3656474	0.033465	7.865	7.905	0.323	8.55
10847 SRCAP	3656473	0.026083	7.649	7.648	0.258	8.55
10847 SRCAP	3656505	0.032294	6.751	6.7	0.374	8.55
10885 WDR3	2354095	0.037583	6.419	6.309	0.539	4.604
10905 MAN1A2	2353904	0.017277	8.656	8.722	0.573	6.476
10905 MAN1A2	2353901	0.037508	7.999	8.005	0.536	6.476
10905 MAN1A2	2353910	0.027551	8.17	8.141	0.457	6.476
10905 MAN1A2	2353899	0.040846	8.44	8.376	0.417	6.476
10922 FASTK	3079359	0.031106	7.724	7.706	0.278	6.808
10970 CKAP4	3469691	0.042259	8.706	8.69	0.468	8.98
11000 SLC27A3	2359887	0.033669	7.183	7.294	0.528	7.232
11000 SLC27A3	2359889	0.034527	7.822	7.811	0.33	7.232
11012 KLK11	3868849	0.036152	8.015	8.005	0.325	4.956
11027 LILRA2	3841409	0.03632	8.963	9.031	0.372	10.295
11035 RIPK3	3558245	0.035574	7.662	7.635	0.413	7.498
11176 BAZ2A	3458020	0.026452	10.437	10.524	0.276	10.119
11190 CEP250	3883355	0.046447	3.63	3.662	0.546	4.931
11214 AKAP13	3606481	0.029613	10.235	10.205	0.369	9.512
11338 U2AF2	3842360	0.029587	8.806	8.787	0.34	8.165
22823 MTF2	2346973	0.028218	7.949	7.935	0.467	7.404
22853 LMTK2	3014203	0.026647	8.847	8.893	0.306	8.891
22856 CHSY1	3642090	0.031221	10.304	10.326	0.487	10.158
22870 PPP6R1	3871292	0.034076	10.694	10.683	0.318	8.975
22878 TRAPPC8	3803247	0.032721	7.503	7.636	0.447	7.783
22897 CEP164	3350926	0.03888	6.398	6.514	0.572	6.142
22904 SBNO2	3845006	0.045202	7.815	7.933	0.395	9.034
22906 TRAK1	2619187	0.034233	7.791	7.734	0.367	7.337
22980 TCF25	3674477	0.019823	8.908	8.916	0.35	8.17
23013 SPEN	2322139	0.012992	11.496	11.511	0.163	9.317
23038 WDTC1	2326938	0.013197	9.498	9.567	0.313	9.148
23038 WDTC1	2326937	0.014297	9.196	9.228	0.258	9.148
23038 WDTC1	2326936	0.038997	7.018	7.053	0.38	9.148
23152 CIC	3834728	0.04482	10.52	10.536	0.322	7.408
23152 CIC	3834713	0.032646	7.324	7.284	0.452	7.408
23162 MAPK8IP3	3644130	0.035131	6.42	6.442	0.416	7.292

Table S7. Primers used for quantitative real-time PCR validation

Gene symbol	Primer direction	Sequence(5'~3')
ANXA3	Forward	GGCAGCTGATTGTTAAGGAATATC
	Reverse	CCTGCTTGTCCTGGTAGTTAAG
CALR	Forward	TCTACGGTGACGAGGAGAAA
	Reverse	CATGTCTGTCTGGTCCAAACTAT
CD22	Forward	TGTTACCCGGTATGAATGGAAA
	Reverse	CCAGAGTGAATCTCGGAAAGG
CDK5RAP2	Forward	CAGGCCAGTGATGTGGATTA
	Reverse	CTCAGGAGATTCAGGCAGAAG
CEP250	Forward	AACACCCTGAAGACAGAAGTAG
	Reverse	CGACCTGCAAAGCATTTCTC
CST7	Forward	GCAGCCAGATACAGTGTTGA
	Reverse	AAGGTGTGGTTGGTTTGGA
DCUN1D1	Forward	CCATGAACTCCTGTTTGGAGA
	Reverse	AGGATCATTGGACAGGAAGAAG
RBMS1	Forward	GTGGTACAAGTCGTGGTGTT
	Reverse	CTTCTCTATGCCATGGTCTTCC
HLA-DRB1	Forward	GAACGGCCAGGAAGAGAAG
	Reverse	CGACTCCACTCAGCATCTTG
IL8	Forward	TTGGCAGCCTTCCTGATTT
	Reverse	AGACAGAGCTCTCTTCCATCA
MMP25	Forward	GGCAGCGTGTGGAAGAA
	Reverse	GGCAAAGTCGATGAGGATGT
PLK1S1	Forward	TCCATCTTCTCCCTCCATCTT
	Reverse	TTCTCCTTGGGAAGGTGTTTC
PLXNB2	Forward	GTGGATGCGGTACAGAAGAA
	Reverse	CGGTACACCTGGTCAATGAT
PRKACA	Forward	TTCCGTTCCTCGTCAAACTC
	Reverse	GATCCAGCGAGTGCAGATAC
RPL14	Forward	TGATCAGAACAGGGCTTTGG
	Reverse	TCTCTGGCTTCAATCTTCTTGG
S100A10	Forward	CTTAACAAAGGAGGACCTGAGAG
	Reverse	CCCTTCTGCTTCATGTGTACTA
SCARF2	Forward	GCGCCACCGGTTTCTAT
	Reverse	GACTGGAAGTCGCAGTGTC
SGK1	Forward	TGCATTCACTGAACATCGTTTATAG
	Reverse	CAGTCCACAGTCCTGTCATAAG
TBC1D15	Forward	AGCAGAATGGGACATGGTTAATA
	Reverse	GAAAGTGTAGAGCAGGGAGAAC
TMEM123	Forward	CCAGTGCTAACTCAACAGAGAC
	Reverse	GGTGTAGACTTTAAGGTGGTAGAAG
VCAN	Forward	CAGCTCTTTGCTGCCTATGA
	Reverse	ACCATCCAGATGATCCACATAAC

Table S8. The target sequences of miRNAs for qRT-PCR

Name on Array	Assay Name	Assay ID
hsa-miR-34a	hsa-miR-34a	426
hsa-miR-127-3p	hsa-miR-127	452
hsa-miR-409-3p	hsa-miR-409-3p	2332
hsa-miR-494	hsa-miR-494	2365
hsa-miR-551a	hsa-miR-551a	1519
hsa-miR-933	hsa-miR-933	2176
hsa-miR-379	mmu-miR-379	1138
has-miR-19a	hsa-miR-19a	395
hsa-miR-128	hsa-miR-128a	2216
hsa-miR-140-5p	mmu-miR-140	1187
hsa-miR-21	hsa-miR-21	397
hsa-miR-29b-1*	hsa-miR-29b-1*	2165
hsa-miR-421	hsa-miR-421	2700
hsa-miR-484	hsa-miR-484	1821
hsa-miR-503	hsa-miR-503	1048